

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1610jxm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

STN,  
Inventor  
Search:

10.17.02

10/088425

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock  
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area  
NEWS 4 Apr 09 ZDB will be removed from STN  
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and  
IFIUDB  
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and  
ZCAPLUS  
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available  
NEWS 9 Jun 03 New e-mail delivery for search results now available  
NEWS 10 Jun 10 MEDLINE Reload  
NEWS 11 Jun 10 PCTFULL has been reloaded  
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment  
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;  
saved answer sets no longer valid  
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY  
NEWS 15 Jul 30 NETFIRST to be removed from STN  
NEWS 16 Aug 08 CANCERLIT reload  
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN  
NEWS 18 Aug 08 NTIS has been reloaded and enhanced  
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded  
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded  
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced  
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced  
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file  
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS  
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA  
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985  
  
NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer

=> E TAKASE MITSURU/AU 25

E1	67	TAKASE MITSUNORI/AU
E2	56	TAKASE MITSUO/AU
E3	19 -->	TAKASE MITSURU/AU
E4	1	TAKASE MITUITIRO/AU
E5	2	TAKASE MITUNORI/AU
E6	4	TAKASE MITUO/AU
E7	1	TAKASE MIYUKI/AU
E8	1	TAKASE MORICHIKA/AU
E9	1	TAKASE MOTOHIRO/AU
E10	1	TAKASE MOTOYOSHI/AU
E11	1	TAKASE MUMEAKI/AU
E12	44	TAKASE MUNEAKI/AU
E13	8	TAKASE N/AU
E14	4	TAKASE NAGATAKE/AU
E15	8	TAKASE NAME NOT TRANSLATED/AU
E16	3	TAKASE NAOAKI/AU
E17	5	TAKASE NAOKI/AU
E18	5	TAKASE NAOKO/AU
E19	1	TAKASE NAOSHI/AU
E20	1	TAKASE NATSUKO/AU
E21	9	TAKASE NOBORU/AU
E22	1	TAKASE NOBUAKI/AU
E23	37	TAKASE NOBUMITSU/AU
E24	9	TAKASE NOBUO/AU
E25	1	TAKASE NOBUTAKE/AU

=> S (E3) AND (CARBOXAMID?)

19 "TAKASE MITSURU"/AU

16882 CARBOXAMID?

L15 2 ("TAKASE MITSURU"/AU) AND (CARBOXAMID?)

=> s l15 not l9

L16 1 L15 NOT L9

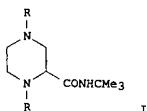
=> d l16 ibib abs hitstr

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000:120860 CAPLUS  
 DOCUMENT NUMBER: 132:180586  
 TITLE: Method for preparation of piperazine-2-carboxamide derivatives  
 INVENTOR(S): Hirai, Yukio; Takase, Mitsuru; Takata, Mitsumasa; Nagasaki, Fumihiko  
 PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000053656	A2	20000222	JP 1998-238001	19980810

OTHER SOURCE(S): CASREACT 132:180586; MARPAT 132:180586  
 GI

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 presence of DBU under reflux for 5 h to give 83.2%  
 N-tert-butyl-1,4-dibenzyl-2-piperazinecarboxamide, I (R = Bn) and 10.5%  
 CH<sub>2</sub>:CH(OSO<sub>2</sub>Me)CONHMe<sub>3</sub>.



AB The title compds. [I; R = H, Bn (benzyl)] are prepd. by cyclocondensation of N-tert-butyl-3-halo-2-hydroxypropanamide [XCH<sub>2</sub>CH(OH)CONHMe<sub>3</sub>] with N,N'-dibenzylethylenediamine (BnNHCH<sub>2</sub>CH<sub>2</sub>NHBn). This process neither uses expensive platinum oxide nor specialized app. and gives N-tert-butyl-2-piperazinecarboxamide in good yields in an industrially advantageous manner, which is useful as an intermediate for drugs or agrochems. Thus, epoxidn. of N-tert-butylacrylamide with m-chloroperbenzoic acid in CHCl<sub>3</sub> at room temp. for 100 h gave 58.0% N-tert-butyl-2,3-epoxypropanamide which was dissolved in CHCl<sub>3</sub> and treated with concd. HCl at room temp. for 30 min to quant. give N-tert-butyl-3-chloro-2-hydroxypropanamide. Mesylation of the latter compd. with methanesulfonyl chloride in the presence of Et<sub>3</sub>N at room temp. for 1 h gave 72.6% N-tert-butyl-3-chloro-2-(methanesulfonyloxy)propanamide which underwent cyclocondensation with N,N'-dibenzylethylenediamine in the

=> E YAMAZAKI SATORU/AU 25

E1	3	YAMAZAKI SATOKO/AU
E2	2	YAMAZAKI SATOMI/AU
E3	81 -->	YAMAZAKI SATORU/AU
E4	173	YAMAZAKI SATOSHI/AU
E5	2	YAMAZAKI SATOYUKI/AU
E6	2	YAMAZAKI SAYAKA/AU
E7	8	YAMAZAKI SAYURI/AU
E8	1	YAMAZAKI SCIICHIRO/AU
E9	8	YAMAZAKI SEI/AU
E10	1	YAMAZAKI SEI ICHIRO/AU
E11	2	YAMAZAKI SEIETSU/AU
E12	6	YAMAZAKI SEIHACHIRO/AU
E13	30	YAMAZAKI SEIICHI/AU
E14	60	YAMAZAKI SEIICHIRO/AU
E15	1	YAMAZAKI SEIICHIROU/AU
E16	122	YAMAZAKI SEIJI/AU
E17	3	YAMAZAKI SEIJIRO/AU
E18	1	YAMAZAKI SEIJU/AU
E19	1	YAMAZAKI SEIKI/AU
E20	8	YAMAZAKI SEIRO/AU
E21	1	YAMAZAKI SEISAKU/AU
E22	2	YAMAZAKI SEISHI/AU
E23	1	YAMAZAKI SEIZI/AU
E24	1	YAMAZAKI SENE/AU
E25	1	YAMAZAKI SENJI/AU

=> S (E3) AND (CARBOXAMID?)

81 "YAMAZAKI SATORU"/AU

16882 CARBOXAMID?

L17 2 ("YAMAZAKI SATORU"/AU) AND (CARBOXAMID?)

=> s 117 not 19

L18 1 L17 NOT L9

=> s 118 not 110

L19 1 L18 NOT L10

=> s 119 not 112

L20 1 L19 NOT L12

=> d 120 ibib abs hitstr

L20 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:420276 CAPLUS  
DOCUMENT NUMBER: 127:130827  
TITLE: KMD-3213, a novel .alpha.1A-adrenoceptor  
antagonist, potentially inhibits the functional  
.alpha.1-adrenoceptor in human prostate  
AUTHOR(S): Moriyama, Nobuo; Akiyama, Katsuyoshi; Murata,  
Satoshi; Taniguchi, Jun; Ishida, Norio; ~~Yamaguchi~~,  
Satoru; Kawabe, Kazuki  
CORPORATE SOURCE: Department of Urology, Faculty of Medicine, The  
University of Tokyo, 7-3-1, Hongo, Bunkyo-Ku,  
Tokyo, 113, Japan  
SOURCE: European Journal of Pharmacology (1997),  
331(1), 39-42  
CODEN: EJPHAZ; ISSN: 0014-2999  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB KMD-3213, (-)-(R)-1-(3-hydroxypropyl)-5-([2-([2-(2,2,2-  
trifluoroethoxy)phenoxy]ethyl)amino]propyl]indoline-7-carboxamide  
, is a novel and selective .alpha.1A-adrenoceptor antagonist. The  
potency of this drug to antagonize functional  
.alpha.1-adrenoceptor-mediated  
contraction in human prostatic smooth muscle was evaluated and  
compared with that of other .alpha.1-adrenoceptor antagonists. KMD-3213  
inhibited  
noradrenaline-induced contractions with an apparent pKB value of  
9.45,  
indicating a potency similar to that of tamsulosin. The affinity  
of prazosin for prostatic .alpha.1-adrenoceptors is given as potency  
for the .alpha.1L-adrenoceptor with an estd. pA2 value of 8.84. The data  
obtained in this study suggest that KMD-3213, an  
.alpha.1A-adrenoceptor-selective  
antagonist, has strong affinity for the .alpha.1L-adrenoceptor in  
the human prostate.

=> E ISHII YUTAKA/AU 25

E1	7	ISHII YUSUKE/AU
E2	1	ISHII YUSUNOBU/AU
E3	87 -->	ISHII YUTAKA/AU
E4	1	ISHII YUTARO/AU
E5	1	ISHII YUTOKU/AU
E6	4	ISHII YUU/AU
E7	3	ISHII YUUJI/AU
E8	1	ISHII YUUKI/AU
E9	22	ISHII YUUKO/AU
E10	11	ISHII YUZO/AU
E11	1	ISHII YUZOU/AU
E12	1	ISHII ZENICHI/AU
E13	12	ISHII ZENSHO/AU
E14	1	ISHIIA C/AU
E15	1	ISHIIB M/AU
E16	2	ISHIIDA CHIAKI/AU
E17	1	ISHIIDA H/AU
E18	1	ISHIIDA KAZUAKI/AU
E19	1	ISHIIDA RYOJI/AU
E20	1	ISHIIDE AKITOSHI/AU
E21	3	ISHIIDE HIDEKI/AU
E22	8	ISHIIDE TAKASHI/AU
E23	4	ISHIIE SHUNJI/AU
E24	8	ISHIIE TATSUJI/AU
E25	1	ISHIIGAME M/AU

=> S (E3) AND (CARBOXAMID?)

87 "ISHII YUTAKA"/AU

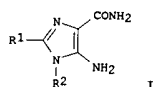
16882 CARBOXAMID?

L21 1 ("ISHII YUTAKA"/AU) AND (CARBOXAMID?)

=> d l21 ibib abs hitstr

L21 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2001:228862 CAPLUS  
DOCUMENT NUMBER: 134:252338  
TITLE: Processes for the preparation of  
4(5)-amino-5(4)-  
carboxamidoimidazoles and intermediates  
thereof  
INVENTOR(S): Shibasaki, Hiroaki; Nagasaki, Fumihiko; Takase,  
Mitsuru; Yamazaki, Satoru; Ishii, Yutaka;  
Oonata, Kimihiko  
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan; Ibaraki Kasei  
Co., Ltd.  
SOURCE: PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021592	A1	20010329	WO 2000-JP6397	20000920
W: CN, IN, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,				
MC, NL, PT, SE				
JP 2001151760	A2	20010605	JP 1999-330103	19991119
JP 2001302609	A2	20011031	JP 2000-116218	20000418
JP 2001158776	A2	20010612	JP 2000-284780	20000920
EP 1215206	A1	20020619	EP 2000-961096	20000920
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,				
MC, PT, IE, FI, CY				
PRIORITY APPLN. INFO.:				
JP 1999-264818 A 19990920				
JP 1999-330103 A 19991119				
JP 2000-116218 A 20000418				
WO 2000-JP6397 W 20000920				
OTHER SOURCE(S): CASREACT 134:252338; MARPAT 134:252338				
GI				



AB The invention provides novel processes for prepg. efficiently  
comps. of  
general formula (I) (wherein R1 and R2 are each independently  
hydrogen,  
optionally substituted C1-10 alkyl, C3-14 hydrocarbyl bearing an  
alicyclic  
skeleton, optionally substituted alkynyl, optionally substituted  
aryl,

L21 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS (Continued)  
optionally substituted aralkyl, optionally substituted  
heterocyclcyl,  
optionally substituted heterocyclcylalkyl, N-optionally substituted  
carbamoyl, or alkoxycarbonyl) and intermediates thereof. Comps.  
of  
general formula I can be prepd. by subjecting compds. of general  
formula  
R2NHC(R1):NC(CN):C(NH2)CN (II; R1 and R2 are defined above) and/or  
salts  
thereof to cyclization hydrolysis in an aq. basic soln. Further,  
compds.  
of general formula II can be prepd. from industrially easily  
available  
diaminomaleonitrile in a high yield. The compds. I are useful as  
intermediates for agrochems. and drugs, e.g. dacarbazine and  
temozoromide  
(anticancer agent) and urazamide (liver-protective agent). Thus,  
50 mL  
H2O and 43.0 g 25% NaOH were added to 8.0 g N-(2-amino-1,2-  
dicyanovinyl)formamidine and refluxed for 2 h, cooled to room  
temp.,  
neutralized with 35% HCl to pH 7, concd. to dryness, treated with  
ethanol,  
and filtered for removing the insol. salt. The filtrate was  
treated with  
activated charcoal, filtered, and concd. to give a soln. of  
4(5)-aminoimidazole-5-carboxamide (III) which was adjusted to pH  
.ltoreq.3 and cooled at .ltoreq.10.degree.. The pptd. crystals  
were  
collected by filtration and dried to give 84% III.HCl.  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE  
FOR THIS  
RE FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE

=> E OOHATA KIMIHIKO/AU 25

E1	2	OOHATA KENICHI/AU
E2	2	OOHATA KENJI/AU
E3	1 -->	OOHATA KIMIHIKO/AU
E4	2	OOHATA KIMIO/AU
E5	8	OOHATA KIMITAKA/AU
E6	5	OOHATA KIYOSHI/AU
E7	6	OOHATA KIYOSI/AU
E8	1	OOHATA KOHEI/AU
E9	3	OOHATA KOICHI/AU
E10	2	OOHATA KOJI/AU
E11	1	OOHATA KOKI/AU
E12	2	OOHATA KOKICHI/AU
E13	1	OOHATA KOUBUN/AU
E14	1	OOHATA KUNIHIRO/AU
E15	1	OOHATA KUSHIRO/AU
E16	1	OOHATA KYOUSHI/AU
E17	10	OOHATA MANABU/AU
E18	1	OOHATA MASAHIRO/AU
E19	2	OOHATA MASASHI/AU
E20	5	OOHATA MASATO/AU
E21	3	OOHATA MASATOSHI/AU
E22	1	OOHATA MITSUGU/AU
E23	2	OOHATA MITSURU/AU
E24	1	OOHATA NAME NOT TRANSLATED/AU
E25	6	OOHATA NOBUTAKA/AU

=> S (E3 OR E4) AND (CARBOXAMID?)

1	"OOHATA KIMIHIKO"/AU
2	"OOHATA KIMIO"/AU
16882	CARBOXAMID?

L22 1 ("OOHATA KIMIHIKO"/AU OR "OOHATA KIMIO"/AU) AND (CARBOXAMID?)

=> s l22 not l9

L23 0 L22 NOT L9

=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
52.69	342.22

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-5.58	-5.58

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 08:13:18 ON 17 OCT 2002



Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:sssptal626amd

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS	4	Apr 09	ZDB will be removed from STN
NEWS	5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS	6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS	7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS	8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS	9	Jun 03	New e-mail delivery for search results now available
NEWS	10	Jun 10	MEDLINE Reload
NEWS	11	Jun 10	PCTFULL has been reloaded
NEWS	12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS	13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS	14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS	15	Jul 30	NETFIRST to be removed from STN
NEWS	16	Aug 08	CANCERLIT reload
NEWS	17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	18	Aug 08	NTIS has been reloaded and enhanced
NEWS	19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS	21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS	22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	23	Sep 03	JAPIO has been reloaded and enhanced
NEWS	24	Sep 16	Experimental properties added to the REGISTRY file
NEWS	25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS	26	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	27	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS EXPRESS			October 14 CURRENT WINDOWS VERSION IS V6.01, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:57:19 ON 16 OCT 2002

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:57:26 ON 16 OCT 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 OCT 2002 HIGHEST RN 461638-40-4

DICTIONARY FILE UPDATES: 15 OCT 2002 HIGHEST RN 461638-40-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

Uploading 10088425.str

L1 STRUCTURE UPLOADED

=> s l1 ful

FULL SEARCH INITIATED 15:57:39 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2532 TO ITERATE

100.0% PROCESSED 2532 ITERATIONS

560 ANSWERS

SEARCH TIME: 00.00.01

L2 560 SEA SSS FUL L1

=>

Uploading 100884251.str

L3 STRUCTURE UPLOADED

=> s l3 ful  
FULL SEARCH INITIATED 15:59:28 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 209 TO ITERATE

100.0% PROCESSED 209 ITERATIONS 89 ANSWERS  
SEARCH TIME: 00.00.01

L4 89 SEA SSS FUL L3

=> fil caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 281.32 281.53

FILE 'CAPLUS' ENTERED AT 15:59:33 ON 16 OCT 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Oct 2002 VOL 137 ISS 16  
FILE LAST UPDATED: 15 Oct 2002 (20021015/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s l2/p  
L5 302 L2/P

=> d his

(FILE 'HOME' ENTERED AT 15:57:19 ON 16 OCT 2002)

FILE 'REGISTRY' ENTERED AT 15:57:26 ON 16 OCT 2002  
L1 STRUCTURE UPLOADED  
L2 560 S L1 FUL  
L3 STRUCTURE UPLOADED  
L4 89 S L3 FUL

FILE 'CAPLUS' ENTERED AT 15:59:33 ON 16 OCT 2002  
L5 302 S L2/P

=> s l5 and l4

35 L4  
L6 4 L5 AND L4  
=> d 1-4 ibib abs hitstr

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:228862 CAPLUS  
DOCUMENT NUMBER: 134:252338

TITLE: Processes for the preparation of 4(5)-amino-5(4)-carboxamidoimidazoles and intermediates thereof  
INVENTOR(S): Shibasaki, Hiroaki; Nagasaki, Fumihiko; Takase, Mitsuru; Yamazaki, Satoru; Ishii, Yutaka; Oohata, Kimihiko

PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan; Ibaraki Kasei Co., Ltd.

SOURCE: PCT Int. Appl., 41 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

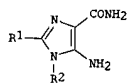
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021592	A1	20010329	WO 2000-JP6397	20000920
W: CN, IN, KR, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

JP 2001151760	A2	20010605	JP 1999-330103	19991119
JP 2001302609	A2	20011031	JP 2000-116218	20000418
JP 2001158776	A2	20010612	JP 2000-284780	20000920
EP 1215206	A1	20020619	EP 2000-961096	20000920
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

PRIORITY APPLN. INFO.:  
JP 1999-264818 A 19990920  
JP 1999-330103 A 19991119  
JP 2000-116218 A 20000418  
WO 2000-JP6397 W 20000920

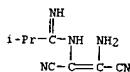
OTHER SOURCE(S): CASREACT 134:252338; MARPAT 134:252338

GI



AB The invention provides novel processes for prepg. efficiently compds. of general formula (I) (wherein R1 and R2 are each independently hydrogen, optionally substituted C1-10 alkyl, C3-14 hydrocarbyl bearing an alicyclic skeleton, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl,

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)



● HCl

IT 72-40-2P, 4-Aminoimidazole-5-carboxamide hydrochloride  
90521-73-6P, 5-Amino-2-propyl-1H-imidazole-4-carboxamide  
227078-19-5P, 5-Amino-2-isopropyl-1H-imidazole-4-carboxamide  
331282-42-9P, N-(2-Amino-1,2-dicyanovinyl)butyramidine hydrochloride

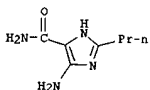
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of aminocarboxamidoimidazoles as intermediates for anticancer and liver-protective agents by cyclization of (aminodicyanovinyl)formamidine derivs.)

RN 72-40-2 CAPLUS  
CN 1H-Imidazole-4-carboxamide, 5-amino-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 90521-73-6 CAPLUS  
CN 1H-Imidazole-4-carboxamide, 5-amino-2-propyl- (9CI) (CA INDEX NAME)



RN 227078-19-5 CAPLUS  
CN 1H-Imidazole-4-carboxamide, 5-amino-2-(1-methylethyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)

optionally substituted heterocyclylalkyl, N-optionally substituted carbamoyl, or alkoxycarbonyl) and intermediates thereof. Compds. of general formula I can be prepd. by subjecting compds. of general formula

R2NHC(R1):NC(CN):C(NH2)CN (II; R1 and R2 are defined above) and/or salts thereof to cyclization hydrolysis in an aq. basic soln. Further, compds.

of general formula II can be prepd. from industrially easily available diaminomaleonitrile in a high yield. The compds. I are useful as intermediates for agrochems. and drugs, e.g. dascarbazine and temozoromide

(anticancer agent) and urazamide (liver-protective agent). Thus, 50 mL

H2O and 43.0 g 25% NaOH were added to 8.0 g N-(2-amino-1,2-dicyanovinyl)formamidine and refluxed for 2 h, cooled to room temp., neutralized with 35% HCl to pH 7, concd. to dryness, treated with ethanol,

and filtered for removing the insol. salt. The filtrate was treated with

activated charcoal, filtered, and concd. to give a soln. of 4(5)-aminoimidazole-5-carboxamide (III) which was adjusted to pH

.1 to req. 3 and cooled at .1 to req. 10 degrees. The pptd. crystals were collected by

filtration and dried to give 84% III.HCl.

IT 331282-40-7P, N-(2-Amino-1,2-dicyanovinyl)formamidine

331282-41-8P, N-(2-Amino-1,2-dicyanovinyl)isobutyramidine hydrochloride

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

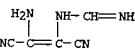
RAC (Reactant or reagent)

(prepn. of aminocarboxamidoimidazoles as intermediates for anticancer

and liver-protective agents by cyclization of (aminodicyanovinyl)formamidine derivs.)

RN 331282-40-7 CAPLUS

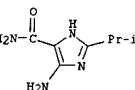
CN Methanimidamide, N-(2-amino-1,2-dicyanoethenyl)- (9CI) (CA INDEX NAME)



RN 331282-41-8 CAPLUS

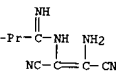
CN Propanimidamide, N-(2-amino-1,2-dicyanoethenyl)-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 331282-42-9 CAPLUS

CN Butanimidamide, N-(2-amino-1,2-dicyanoethenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

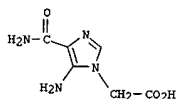


● HCl

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

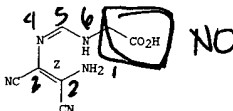
L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000:270332 CAPLUS  
 DOCUMENT NUMBER: 133:85826  
 TITLE: Peptide nucleic acids rather than RNA may have been the first genetic molecule  
 AUTHOR(S): Nelson, Kevin E.; Levy, Matthew; Miller, Stanley L.  
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of California at San Diego, La Jolla, CA, 92093-0506, USA  
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2000), 97(8), 3868-3871  
 CODEN: PNASA6; ISSN: 0027-8424  
 PUBLISHER: National Academy of Sciences  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Numerous problems exist with the current thinking of RNA as the first genetic material. No plausible prebiotic processes have yet been demonstrated to produce the nucleosides or nucleotides or for efficient two-way nonenzymic replication. Peptide nucleic acid (PNA) is a promising precursor to RNA, consisting of N-(2-aminoethyl)glycine (AEG) and the adenine, uracil, guanine, and cytosine-N-acetic acids. However, PNA has not yet been demonstrated to be prebiotic. We show here that AEG is produced directly in elec. discharge reactions from CH<sub>4</sub>, N<sub>2</sub>, NH<sub>3</sub>, and H<sub>2</sub>O. Elec. discharges also produce ethylenediamine, as do NH<sub>4</sub>CN polymers. AEG is produced from the robust Strecker synthesis with ethylenediamine. The NH<sub>4</sub>CN polymers in the presence of glycine leads to the adenine and guanine-N<sub>9</sub>-acetic acids, and the cytosine and uracil-N1-acetic acids are produced in high yield from the reaction of cyanoacetaldehyde with hydantoic acid, rather than urea. Preliminary expts. suggest that AEG may polymerize rapidly at 100.degree. to give the polypeptide backbone of PNA. The ease of synthesis of the components of PNA and possibility of polymers of AEG reinforce the possibility that PNA may have been the first genetic material.  
 IT 112630-45-2P 281676-74-2P  
 RL: EPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent) (role of PNA in prebiotic mol. evolution)  
 RN 112630-45-2 CAPLUS

L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 CN 1H-imidazole-1-acetic acid, 5-amino-4-(aminocarbonyl)- (9CI) (CA INDEX NAME)



RN 281676-74-2 CAPLUS  
 CN Glycine, N-[[[(1Z)-2-amino-1,2-dicyanoethenyl]amino]methylene]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



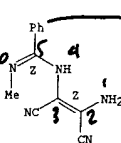
REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1988:150133 CAPLUS  
 DOCUMENT NUMBER: 108:150133  
 TITLE: Chemistry of nitrilium salts. Part 4. Some reactions of 5-amino-4-(C-cyanoformimidoyl)imidazoles from nitrilium trifluoromethanesulfonate salts and diaminomaleonitrile  
 AUTHOR(S): Booth, Brian L.; Coster, Ronald D.; Fernanda, M.; Proenca, J. R. P.  
 CORPORATE SOURCE: Inst. Sci. Technol., Univ. Manchester, Manchester, M60  
 SOURCE: JQD, UK  
 J. Chem. Soc., Perkin Trans. 1 (1987), (7), 1521-6  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 108:150133  
 GI

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)

CM 1  
 CRN 112995-30-9  
 CMF C12 H11 N5

Double bond geometry as shown.



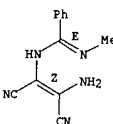
CM 2  
 CRN 1493-13-6  
 CMF C H F3 O3 S



RN 112995-33-2 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, compd. with (2E)-N-(2-amino-1,2-dicyanoethenyl)-N'-methylbenzencarboximidamide (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 112995-32-1  
 CMF C12 H11 N5

Double bond geometry as shown.



AB Diaminomaleonitrile reacted readily with RC.tplbond.N+Me O3-SCF3 (R = Me, Ph) to give MeNHC+RNHC(CN):C(CN)NH2 O3-SCF3 (I; R = Me, Ph), which on base treatment under different conditions gave imidazoles II (R1 = cyano, CONH2, C(CN):NH). I reacted with aldehydes and ketones at room temp. to give trifluoromethanesulfonate salts of dihydropurines III (R = Me, Ph; R2 = Me, H; R3 = Me, Ph; R2R3 = (CH2)4). Similarly II (R = Me, R1 = C(CN):NH) reacted with aldehydes, ketones, 1,2- and 1,3-diketones and keto esters to give dihydropurines III (R = R2 = Me, R3 = Me, Et, Ph, COMe, CH2CO2Et, CO2Et, CH2COMe; R = Me, R2 = Ph, R3 = H, Bz) some of which oxidized in air to purines.  
 IT 112995-31-0P 112995-33-2P 112995-35-4P  
 113684-62-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and cyclization of, with aldehydes and ketones, purines from)  
 RN 112995-31-0 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, compd. with (2Z)-N-(2-amino-1,2-dicyanoethenyl)-N'-methylbenzencarboximidamide (1:1) (9CI) (CA INDEX NAME)

*submitted in IOR*

*R<sub>1</sub> = aryl group } yes.*

*R<sub>2</sub> = alkyl*

*yes*

*yes*

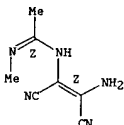
CM 2

CRN 1493-13-6  
CMF C H F3 O3 SRN 112995-35-4 CAPLUS  
CN Methanesulfonic acid, trifluoro-, compd. with (Z,Z)-N-(2-amino-1,2-dicyanoethenyl)-N'-methylethanimidamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112995-34-3  
CMF C7 H9 N5

Double bond geometry as shown.

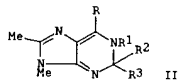
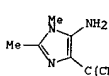


CM 2

CRN 1493-13-6  
CMF C H F3 O3 SRN 113684-62-1 CAPLUS  
CN Methanesulfonic acid, trifluoro-, compd. with (Z,E)-N-(2-amino-1,2-dicyanoethenyl)-N'-methylethanimidamide (1:1) (9CI) (CA INDEX NAME)

CM 1

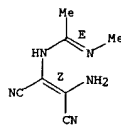
L6 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1982:19863 CAPLUS  
DOCUMENT NUMBER: 96:19863  
TITLE: Synthesis of 6-cyano- and 6-carbamoylpurines and 6-carbamoyl-1,2-dihydropurines from N-methylacetoneitrilium trifluoromethanesulfonate and diaminomaleonitrile  
AUTHOR(S): Booth, Brian L.; Proenca, M. Fernanda  
CORPORATE SOURCE: Dep. Chem., Univ. Manchester Inst. Sci. Technol., Manchester, M60 1QD, UK  
SOURCE: J. Chem. Soc., Chem. Commun. (1981), (15), 788-9  
DOCUMENT TYPE: CODEN: JOCCAT; ISSN: 0022-4936  
LANGUAGE: English  
GI



AB NCC(NH2):C(NH2)CN reacted with [MeC.tplbond.NMe]+ -O3SCF3 to give, after controlled basification (pH 8-9, Na2CO3), 80% imidazole I, which forms 6-cyanopurines with carboxylic acid anhydrides, and with aldehydes, ketones, 1,2- and 1,3-diketones, and keto esters gives 6-carbamoyl-1,2-dihydropurine derivs. from which 6-carbamoylpurines can be obtained. Thus, I with Ac2O gave 80% purine II (R = CN, R1R2 = bond, R3 = Me), whereas I with MeCOCH2CO2Et gave 80% II (R = CONH2, R1 = H, R2 = CH2CO2Et, R3 = Me) which on standing in CHCl3 or EtOH (20.degree., 1-2 days) gave 73% II (R = CONH2, R1R2 = bond, R3 = Me).  
IT 80052-78-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and cyclization of)  
RN 80052-78-4 CAPLUS  
CN Ethanimidamide, N-(2-amino-1,2-dicyanoethenyl)-N'-methyl-, conjugate monoacid, (Z,?)- (9CI) (CA INDEX NAME)  
Double bond geometry as described by E or Z.

CRN 113684-61-0  
CMF C7 H9 N5

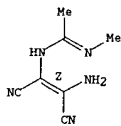
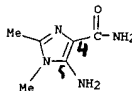
Double bond geometry as shown.



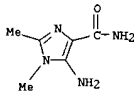
CM 2

CRN 1493-13-6  
CMF C H F3 O3 S

IT 78750-93-3P  
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)  
RN 78750-93-3 CAPLUS  
CN 1H-Imidazole-4-carboxamide, 5-amino-1,2-dimethyl- (9CI) (CA INDEX NAME)

● H<sup>+</sup>

IT 78750-93-3P  
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)  
RN 78750-93-3 CAPLUS  
CN 1H-Imidazole-4-carboxamide, 5-amino-1,2-dimethyl- (9CI) (CA INDEX NAME)



=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	17.95	299.48
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-2.48	-2.48

STN INTERNATIONAL LOGOFF AT 16:00:17 ON 16 OCT 2002